



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,436	01/30/2001	Claudio De Girolamo	Q62839	9169

7590

08/03/2005

SUGHRUE, MION, ZINN,
MACPEAK & SEAS, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
WASHINGTON, DC 20037-3213

EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
----------	--------------

2662

DATE MAILED: 08/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,436

Applicant(s)

GIROLAMO ET AL.

Examiner

Hanh Nguyen

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Amendment filed 5/3/05.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/30/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings in Fig.3 is objected to because according to specification , page 6, lines 10-20, descriptions "NO" to block 20 should be "YES" and "YES" to block 22 should be "NO".

" a network manager" in claim 1 is not indicated in the drawing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 7-10 are rejected under 35 USC 102(e) as being unpatentable by Ando (Pat. 6,526,020 B1) in view of Chaudhuri (Pat. 6,324,162 B1).

In claims 1 and 7, Ando discloses a MS-SPRING network (Transoceanic system, Fig.8, col.1, lines 5-10) comprising: network elements or nodes (Fig.8, NE1-NE8, see col.1, lines 15-20), each node comprising a controller(CPU 10, Fig.9), and a memory (Memory 200, Fig.9). (See col.1, lines 32-40). A fiber optic spans (a ring, Fig.8) interposed between the network elements (N1-N8) to form a ring, each network element (Ni) being connected to adjacent network elements (N2-N8) through said fiber optic spans allowing a bidirectional communication therebetween (see col.1, lines 10-15). At least one path (R8, Fig.8) connecting two or more network elements of the ring (N1, N8, N7, N6, N5, N4, N3), the at least one path, in a network free-of-failure condition, following a corresponding at least one Path Nominal

Route(see col.1, lines 15-20). The method comprising the steps of providing the network manager with information relating to the Nominal Route (Normal path information 200a, Fig.9) of the at least one path (see col.1, lines 40-48); and information of current status of the at least one network element so as to calculate the current route (route 10, Fig.10 or route 11, Fig.11) of the at least one path.(See col. 1, lines 43-65). Ando does not disclose a network manager that control protection mechanism.

Chaudhuri discloses a network manager (Fig.2, Restoration Path Computation System 20) that control protection mechanism (See col.3, lines 55-65 & col.4, lines 5-40). The network manager (fig.2, RPCS 20) computes alternate restoration paths between endpoint nodes based on stored information in path data base 26 and restoration database 28 (calculate current route of the at least one path, see col.4, lines 20-40). Therefore, it would have been obvious to one ordinary skilled in the art to implement the RPCS 20 of Chaudhuri into the transoceanic ring network of Ando as a network manager to protect traffic travelling in the network. The multivation is to keep undelivery traffic from being being routed to invalid destination by rerouting the traffic via protection spans.

In claims 2 and 8, Ando discloses identifying which paths of the at least one path are carried at a span (see col.2, lines 10-15).

In claims 9 and 10, Ando discloses a computer program code means adapted to run on a computer and a computer-readable medium having a program recorded thereon comprising computer program code means (See col.7, lines 35-40).

In claim 3, Ando discloses analyzing the Path Nominal Route of the at least one path See claim 1 above). Ando does not disclose making a determination as whether at least one of the Nominal Route spans comprises a node requesting the intervention of the protection mechanism to serve a failure or a user command resulting in a span re-routing; and the determination is, in the affirmative, declaring that the current route coincides with the nominal route, with a main span being replaced by a spare span. Chaudhuri discloses, in Fig.2, when a working channel 16 (main span) on link 14, fails, a localized restoration is sought to restore traffic onto restoration channel 18 (spare span) within the link connecting nodes 12A and 12D(main spans are replaced by spare spans). Nodes 12A checks for the availability of restoration channel 18 (verifying if at least one of the Nominal Route spans comprises a node (node 12A) requesting the intervention of the protection mechanism to serve a failure. See col. (See col.6, lines 7-45). Therefore, it would have been obvious to one ordinary skill in the art to apply the teaching of Chaudhuri into the Ando system to connect the two nodes via the spare span when the main span fails. The motivation is to prevent lost data when a failures occurs.

Allowable Subject Matter

Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In claim 4, the prior art does not disclose checking for ring re-routing, when the determination in step (c2) is negative, by determining whether at least one of the spans of the nominal route is bounded by a node requesting the intervention of the protection mechanism to serve a failure.

Response to Arguments

Applicant's arguments filed on 5/3/05 have been fully considered but they are not persuasive.

In response to the argument made by applicant filed on 3/24/05, page 7, Applicant believes that neither the ring networks of Ando nor Chaudhuri need self-healing mechanisms. Examiner understands that the self healing mechanism is not claimed in the claimed invention. Therefore, Examiner did not consider the self healing mechanism in the claim. The claimed invention made by applicant is to identify current route in MS-Spring network to protect failure of network. Ando does not disclose the network manager, therefore, the restoration path computation system 20, fig.2 of Chaudhuri is used as a network manager in Ando in order to determine restoration paths in Ando 's ring network.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

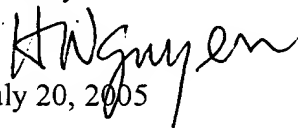
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou, can be reached on 571 272 3088. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Nguyen
Primary Examiner


July 20, 2005

**HANH NGUYEN
PRIMARY EXAMINER**